U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2005-197-EA

CASEFILE/PROJECT NUMBER (optional):

PROJECT NAME: Stump Treatment of Tamarisk and Russian Olive
– Scenery, Tschuddi and Blacks Gulches
White River near Rangely, CO

LEGAL DESCRIPTION: Scenery, Tschuddi, Blacks Gulches:
Township 1 North, Range 96 West, Section: 5
Township 2 North, Range 96 West, Sections: 1-4, 8-17, 20-24, 26-29, 32, 33
Township 3 North, Range 96 West, Sections: 24-27, 33-36

White River Treatment:
Township 2 North, Range 102 West, Section: 36

APPLICANT: USDI-BLM, White River Field Office

ISSUES AND CONCERNS (optional): Tamarisks (*Tamarix ramosissima)*, also known as salt cedar, and Russian olives (*Elaeagnus angustifolia)* are introduced species that are displacing native vegetation along many streams, reservoirs, canals, and drainages. These plants can form thickets that eventually dominant a drainage and are found in much of the western United States. Tamarisk is a deciduous shrub or small tree that grows from 5 to 20 feet tall. Russian olive, which has no relation to olive trees, is also a deciduous tree which usually grows from 15 to 25 feet in height. Both species are located on the state of Colorado noxious weed list for controlling populations and spread.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: The proposed action's objective is to locally determine the best treatment methods for controlling tamarisk and Russian olives within typical drainages found in the White River Field Office (WRFO). The proposed action is the first test phase that will lead to a greater knowledge for the treatment of these invasive species throughout the field office.

Tschuddi, Blacks, and Scenery Gulches have intermittent water within the upper portions of the drainages that is usually associated with spring runoff. Tschuddi Gulch and Scenery Gulch merge to form the Blacks Gulch and are isolated drainages whose tamarisks seeds source is limited to the immediate drainages. The majority of treatment areas within these drainages involve no surface water. Vegetation associated with these drainages and uplands consists mainly of greasewood, Wyoming sagebrush, and tamarisks with an understory of western wheatgrass, Sandberg bluegrass, and cheatgrass, an invasive non-native grass. The majority of soils are Tisworth fine sandy loam, 0-5% slopes and the associated ecological site is an alkaline slope.

The White River Treatment area is located adjacent to the White River in Rangely, Colorado. The nearby vegetation is mainly dominated by cottonwoods, willows, tamarisks, and Russian olives with an understory of western wheatgrass, alkali sacaton, and inland saltgrass. The majority of soils in this treatment area are Colorow sandy loam and fluvaquents which are frequently flooded. Russian olives are typically located within the terraces of the channel.

Proposed Action: To control and treat tamarisks and Russian olives in the Scenery Gulch, Tschuddi Gulch, Black Gulch, and Russian Olives along the White River using one of two herbicides with approval for aquatic use in Colorado: Glyphosate with the brand name of Rodeo® by Dow AgroSciences. Research by Dow AgroSciences has shown when used according to directions for cut stump application, this product will control, partially control or suppress most woody brush and tree species. The other herbicide is Isopropoylamine salt of Imazapyr with the brand name of Habitat® by BASF - The Chemical Company. Research by BASF has shown when used according to directions for cut stump application, this product will control, partially control or suppress most woody brush and tree species.

Rodeo® (Glyphosate) is an herbicide that is a water-soluble liquid which mixes readily with water and nonionic surfactant to be applied as a foliar spray for the control of many herbaceous and woody plants. Rodeo® is intended for control of annual and perennial weeds and woody plants in and around aquatic and other non-crop sites; also for use in wildlife habitat areas, for perennial grass release, and grass growth suppression. The active ingredient in Rodeo® moves through the plant from the point of contact to and into the root system.

Habitat® (Isopropoylamine salt of Imazapyr) is an herbicide for aquatic and vegetation control that inhibits a plant specific enzyme (acetohydroxyacid synthase, AHAS) that causes the plant to stop growing and slowly die as its food and energy reserves are exhausted. This enzyme is not found in animals or humans. Habitat® is an aqueous (water-based) solution, water soluble, nonvolatile, and has a low vapor pressure, thus it will not readily move from the application site to harm off-target plants via volatilization in the air. Habitat® dissipates rapidly in aquatic systems with very little dissipation into the sediment.

For best results, cutting and stump treatment shall take place during the fall period of active growth. First, the tree is cut and a stump is left using hand clippers, chain saws, or battery powered saw tools along with any necessary safety precautions for noise, eye and hand protection as outlined by BLM safety protocol. Second, the stump is treated by “painting” individual stumps with the herbicide. The woody material left from cutting actions may be

scattered, chipped, and/or burned dependent upon the locality and feasibility of the work. No surfactant is recommended for stump treatments.

In the Scenery Gulch drainage: The proposed action is to apply a 100 percent solution of the product Rodeo® to freshly cut species surface immediately after cutting.

In the Tschuddi Gulch drainage: The proposed action is to apply a diluted solution, as per the label, of the product Habitat® to freshly cut species surface immediately after cutting.

It is further proposed that in the fall of 2006 that treatments will be initiated in both the East and West Tschuddi drainages with the product Rodeo® at a 50 percent solution. This may require pack trips of equipment and chemical by 4-wheeler, horse and/or mule, or human.

In the Blacks Gulch drainage: The proposed action is to apply either of these two products (per label instructions) to freshly cut species surface immediately after cutting. This area will be treated after treatment is done in the upper drainages.

The reason for the difference in product treatment by gulch is to help determine which product controls these species best in the identified drainage areas and associated soil types so that the White River Field Office can make best use of time and product in future situations relative to similar sites.

On the portion of the White River near the town of Rangely, Colorado the proposed action is to use only the herbicide Rodeo® at a 50% solution. The Russian Olives trees located on public lands will be cut and piled. A burn plan and smoke permit will be completed over the winter of 2005 for a winter burn in 2006 of the tree piles. The proposed action is to apply the product, per label instructions, to freshly cut species surface immediately after cutting. Notice markers will be posted across the project area to inform the public regarding the herbicide; date treated, and contact information. This treatment area will be initiated in fall of 2005. Treatments will take place for the three years identified in the herbicide duration of 2005, 2006 and 2007. Follow up treatment of any Russian olive regrowth will be done the following year.

Follow-up treatments in future years of above mentioned methods may be required dependent upon success rates.

The application will be made by or under the supervision of a BLM Certified Pesticide Applicator. The application will be made according to label directions and restrictions. See the attached Pesticide Use Proposal, labels and material safety data sheets (MSDS) for further detail.

Mitigation and Stipulations Associated with the Proposed Action Alternative: Only federally registered and BLM approved herbicides will be used.

Herbicides will be applied as per label instructions and restrictions.

All individuals associated with the handling or application of herbicides on public lands will be familiar with the chemicals used and emergency procedures to be used in case of herbicide spill.

The intake operation of water for mixing will be arranged so that an air gap or reservoir will be placed between the live water intake and the mixing tank to prevent back flow or siphoning of chemical into the water source.

Chemical containers will be disposed of as required by the Environmental Protection Agency (EPA).

Any weed treatment within sensitive areas such as; riparian areas, ACECs, WSAs, special status plant or animal habitat, wildlife habitat will be subject to interdisciplinary review as a supplement to this Environmental Assessment.

The potential for drift during application is reduced because the treatment consists of using a brush application. Application will not occur during precipitation or if there is a threat of precipitation.

Label directions will be followed as additional restrictions are required.

The use of 4-wheelers to transport the product will be considered depending on drainage width and topography.

Spray crews will avoid nesting raptors. In the event raptor nest activity is discovered within treatment areas, restrictions on motorized equipment and approach to the nest site will be applied until nest functions are complete.

During preparation of the Pesticide Use Proposal, the project area will be reviewed for known populations of plant species of special concern or their potential habitats. Herbicidal control will avoid those areas containing sensitive plants or on potential sensitive plant. Manual control (cutting without stump treatment) will be the preferred method of control in theses areas. BLM will inventory potential habitat and confirm absence of sensitive plants prior to any herbicidal use should manual control prove ineffective.

During preparation of the Pesticide Use Proposal, if the project area is located within a WSA or ACEC the proposal will be reviewed by the Wilderness/ACEC Specialist. Site specific mitigation will be incorporated into the Pesticide Use Proposal.

Coordination will take place with livestock permittee as to when livestock can safely use areas that have been treated.

Efforts should be taken to avoid or minimize involvement and damage to favorable woody riparian species.

The cut tamarisk and Russian olive whips and/or branches will be scattered on site.

Safeguard Measures: The safe use of herbicides includes precautionary measures to prevent accidental spills. The following written precautions describe measures that will be used to

reduce the chance of such accidents.

The applicable Federal regulations concerning the storage and disposal of herbicides and herbicide containers will be followed. These are described in the EPAs "Regulations for acceptance and Procedures for Disposal and Storage", Federal Register notices as amended.

It is essential to prevent damage to containers so that leaks do not develop; care will be exercised so that containers will not be punctured or ruptured, and so that the lids or caps will not be loosened.

Precautions will be taken in the loading and stacking of herbicide containers in the transporting vehicle to assure that they will not fall as the vehicle moves.

Open containers will not be transported. Partly empty containers will be securely resealed before transportation.

Each day after returning to the field office, all herbicide containers will be inspected for damage and leaks, and the vehicle will be examined for contamination.

No Action Alternative: Under this alternative, there would not be an attempt to treat tamarisk spp. or Russian olives. The alternatives of No Use of Herbicides and No Action were considered in the Vegetation Treatment on BLM Lands in Thirteen Western States EIS (7/91).

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: **(Integrated Pest Management):** Other means of noxious weed management/control include mechanical and biological control. Mechanical control (cultivation) is not appropriate in an extensive rangeland environment because both tamarisk and the Russian olive are deep-rooted perennial species. Biological control species (insects) are not currently available in the United States to either control or reduce the current infestation level. Neither of these alternatives will be analyzed further in this document.

NEED FOR THE ACTION: Tamarisks (Salt Cedar) and Russian Olives are alien noxious species which pose a significant threat to the riparian plant communities of the White River Field Office. Tamarisk (Salt Cedar) is strongly entrenched in neighboring counties to the south and Russian olives existing in neighboring counties as either a planted or invasive species. Currently in Rio Blanco County tamarisk spp. and Russian olives exist in numbers that with diligent effort could potential become a controlled species in our resource area.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-13, Noxious and Problem Weeds. Objective-Manage noxious weeds so that they cause no further negative environmental, aesthetic or economic impact.

Decision Language: The proposed action has been reviewed and found to be in conformance with this plan (43 CFR 1610.5, BLM 1617.3).

RELATIONSHIP TO EXISTING NEPA DOCUMENTS:

This EA is tiered to and incorporates by reference, Vegetation Treatment on BLM Lands in Thirteen Western States, July 1991. The Vegetation Treatment EIS (1991) analyzed both the cumulative and generalized impacts of various methods of noxious weed treatment options. This EA will address the site-specific impacts of herbicidal treatment of Tamarisk (Salt Cedar) and Russian olive, fully recognizing that such treatment is but one part of the integrated pest management approach to noxious species treatment options. While we presently lack a suitable array of biological agents for sustainable management of any noxious weed species, we must pursue an approach that will arrest further spread of these species until an effective biological control approach is available.

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The proposed actions will not be located within any special designated airsheds or non-attainment areas.

Environmental Consequences of the Proposed Action: Air quality will not be impacted by the proposed actions.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: The Scenery, Tschuddi, and Black Gulches treatment areas do not involve any ACECs. The White River treatment site is encompassed by the White River ACEC. This ACEC consists of BLM-administered lands within the river's 100-year floodplain and was described primarily in recognition of riverine riparian values, including aquatic and riparian communities that support populations of bald eagle and Colorado pike-minnow (see T&E Species section). Land use objectives formulated in the White River Resource Management Plan specifically applied to the ACEC include the following:

•Federal land actions within the White River ACEC will be conducted in a manner consistent with the maintenance or enhancement of bald eagle riverine habitat suitability and utility.

•Maintain or improve bank, channel, and floodplain processes associated with designated critical habitats for listed and candidate fishes of the Upper Colorado River Basin.

Environmental Consequences of the Proposed Action: The proposed action, by promoting redevelopment of native riparian vegetation including mature Fremont cottonwood gallery forests and erosion resistant forms of bank vegetation, is consistent with objectives established for the White River ACEC. For a discussion of project effects on bald eagle and Colorado pike-minnow, see Threatened, Endangered, and Sensitive Animal Species section below.

Environmental Consequences of the No Action Alternative: Continued proliferation of exotic plants within the White River corridor would be contrary to resource management objectives established for riparian and special status species values associated with the White River ACEC. For a discussion of these effects see Wetlands and Riparian Zones and Threatened, Endangered, and Sensitive Animal Species sections below.

Mitigation: None. The proposed action was designed to satisfy resource management objectives and land use stipulations established for the White River Resource Management Plan.

CULTURAL RESOURCES

Affected Environment: There is limited inventory data in the project areas, particularly right down in the drainage bottoms where the offending vegetation is located. Two sites are known to be very close to the project areas. One is a prehistoric open camp site and one is a historic structure, a cabin of some sort.

Environmental Consequences of the Proposed Action: Due to the location of the offending vegetation, down right along the stream banks and drainage bottoms, it is unlikely that any cultural resources will be impacted by any of the proposed vegetation removal activities

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

3. Slash piles for burning shall avoid sites 5RB 2710 and 5RB 2796.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The description of this proposal is detailed under the alternatives along with the expected results. Tamarisk spp. and Russian olive are both invasive, non-native species that have the ability to invade and spread through the entire waterway type communities within the White River Resource Area. Tamarisks and Russian olives are highly competitive against native vegetation. Once these invasive, non-native species are established, they strongly displace native vegetation and can form mono-culture thickets.

Within Scenery, Tschuddi, and Blacks Gulches tamarisks are located throughout the drainages, however tamarisks are not solely dominant in these isolated watersheds. They are scattered throughout the gulches and are founds in thick patches in certain localities. Cheatgrass, an

invasive, non-native species is located within the uplands along the lower reaches of Scenery, Tschuddi, and Blacks Gulches.

Russian olives and tamarisk spp. along the White River Corridor have become prevalent throughout the system, thus resulting in the displacement native riparian species.

Environmental Consequences of the Proposed Action: Using the proposed method of control, Tamarisk spp. and Russian olive populations would be eliminated on the treated areas. This would maintain healthy and productive plant communities.

The proposal will have the ability to effectively control tamarisks within Scenery, Tschuddi, and Blacks Gulches as they are not solely dominant and are present on a manageable scale for treatment. Since these gulches form a single drainage they are independent of other drainages. The treatments will isolate these tamarisks populations and potential seed sources; thereby increasing the success rate for the eradication of this invasive, non-native species within these gulches. Due to limited soil disturbances associated with the proposed action, cheatgrass populations will not have the ability to increase in ground cover and will not be influenced by the propped action.

The control of both Tamarisk spp and Russian olives along the White River Corridor will result in other desirable native species to expand into these areas formerly occupied by non-natives. The proposal will aid in the reduced prevalence of these invasive, non-native species.

Environmental Consequences of the No Action Alternative: The Tamarisk spp. and Russian olive would continue to spread and eventually be allowed to dominate the waterway. Failing to control at this time would significantly increase control costs in the future as populations continue to expand.

Mitigative Measures: None.

MIGRATORY BIRDS

Affected Environment: Tamarisk, Russian olive, and low-density cottonwood-dominated riparian communities associated with the lower White River support an assemblage of breeding birds during the months of May, June, and July that include the more specialized riparian associates: blue and black-headed grosbeak, yellow warbler, yellow-breasted chat, and song sparrow, as well as cavity-dwelling species that would be expected to occupy the site's scattered Fremont cottonwoods, including northern flicker, American kestrel, and European starling. The majority of the site above the first terrace is dominated by an open greasewood stand with an annual weed understory (primarily cheatgrass). These habitats support relatively depauperate breeding communities consisting of such generalists as blue-gray gnatcatcher and western meadowlark. None of the birds associated with the project area are categorized as having higher conservation interest by the Rocky Mountain Bird Observatory (i.e., Land Bird Conservation Plan).

Vegetation communities within Tschuddi, Blacks, and Scenery Gulches are comprised mainly of tamarisk, greasewood, and Wyoming big sagebrush with an understory component of western wheatgrass, Sandberg bluegrass, and cheatgrass. Several migratory birds make use of the surrounding sagebrush shrublands during the breeding season (May – July), including Brewer's sparrow, a species of high conservation concern, Vesper's sparrow and green-tailed and spotted towhee.

Environmental Consequences of the Proposed Action: Both Rodeo® Glyphosate and Imazapyr are practically non-toxic to avian wildlife. Because of the relatively low toxicity of these chemicals, and the facts that they do not bioaccumulate, the treatment in the areas will be site-specific (e.g., targeted specifically towards Russian olive and tamarisk), and do not involve vegetation that associated bird species typically use for forage or nesting purposes, there is no reasonable probability that migratory bird species would be exposed to meaningful levels of these herbicides. All work associated with this project would take place during the fall months, well outside the breeding window for migratory bird species.

Environmental Consequences of the No Action Alternative: Under this alternative there would be no potential exposure of migratory bird species to herbicides. However, allowing invasive species to become well established along the White River corridor and within Blacks, Scenery and Tschuddi Gulches would impede the expression of native vegetation, whose resources would be more beneficial to migratory bird species.

Mitigation: None

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: The White River between Rio Blanco Lake and the Utah state line is formally designated critical habitat for the endangered Colorado pike-minnow. Maintenance of proper bank, channel, and floodplain function is specifically identified as essential to the continued existence of this fishery. Potential for direct involvement of occupied habitat is limited to the White River below Taylor Draw Dam (about 30 valley miles below the Black's Gulch project area), a reach adult and larger sub-adult Colorado pike-minnow use as post-spawning and over-winter habitat. No reproductive or rearing habitats are associated with the White River in Colorado.

The lower and especially the middle reaches of the White River support a warm water stream fisheries that includes a number of native fish populations considered sensitive by BLM, including: flannelmouth, mountain, and bluehead sucker, and roundtail chub. Intermittent flows associated with Black's, Tschuddi, and Scenery Gulches eventually contribute to endangered Colorado River fisheries in the White River, but this project area is separated from occupied Colorado pike-minnow habitat by a minimum 47 river miles.

Most of the intermittent channels associated with the Black's Gulch area support simple, warm-water invertebrate communities, but portions of Tschuddi Gulch and a number of spring-borne

wetlands and livestock ponds throughout the Black's Gulch drainage are conspicuously occupied during the spring and early summer months by northern leopard frogs, a BLM sensitive amphibian.

The White River corridor serves as an activity hub for nesting and wintering populations of threatened bald eagles. There are a number of identified nest and winter roost sites associated with the lower White River's mature cottonwood galleries, but no special use features (i.e., identified winter roosts) are located within a minimum 4.5 river miles of the White River treatment site. The White River project area likely receives regular opportunistic foraging use by eagles from November through April.

Environmental Consequences of the Proposed Action: Both forms of chemical are practically non-toxic to aquatic organisms, vertebrate and invertebrate (i.e., LC_{50}s >100-1000 mg/l), and none of the chemicals have been shown to bioaccumulate or display mutagenic, carcinogenic, or teratogenic effects. Because of low toxicity, very small and precise product delivery, and little capacity for offsite transport, it is inconceivable that aquatic communities in the White River or Black's Gulch and its tributaries would be exposed to herbicide at concentrations and duration capable of being measured or exerting adverse influence on aquatic plants, vertebrates or invertebrates.

Efforts to control exotic vegetation along the White River, although small in scale, would strongly complement recovery goals for both Colorado pike-minnow and bald eagle by promoting the redevelopment of native riparian vegetation and natural successional processes that would eventually provide mature cottonwood habitat for perch or nest use by bald eagle and accommodate proper functioning condition of the river's channel processes as pike-minnow habitat.

Control activities would take place outside the period of nesting and winter use functions of bald eagle.

BLM discussed this project with the US Fish and Wildlife Service (FWS) Grand Junction Field Office 6 September 2005. Based on proposed treatment techniques and project intent, USFWS concurred that the project poses no reasonable risk to pike-minnow or bald eagle populations or associated habitats and represents a small-scale benefit to the functional attributes of native riverine gallery forests as pike-minnow and bald eagle habitat. Unless the proposed action is altered, no further consultation with the USFWS is warranted for this project.

Environmental Consequences of the No Action Alternative: Under this alternative there would be no potential exposure of special status species to herbicides. However, delaying treatment or ignoring the continued proliferation of Russian olive and/or tamarisk on the banks and floodplains of the White River would pose an increasingly severe threat to the integrity of aquatic habitats that harbor special status species addressed in this document. Failure to treat these aggressive infestations, particularly those prone to proliferate in bank and floodplain situations, would fail to stem extensive dissemination of seed downstream. Weed proliferations along the river corridor would inevitably displace or thin erosion resistant bank vegetation, increase sediment yields, and slow or reverse channel/bank/floodplain restoration processes, and

would, thereby contradict one of the major recovery goals for critical habitat established by the U.S. Fish and Wildlife Service for the Colorado pike-minnow below Piceance Creek, that is, maintenance of proper functioning condition on the river's 100-year floodplain. Once entrenched, subsequent control of these plants would necessitate more intensive and widespread use of herbicides in increasingly close association with occupied habitats–increasing the likelihood of direct toxicity to special status fish, native riparian vegetation, or other important aquatic constituents (e.g., amphibians, invertebrates). Such situations invariably necessitate more costly resource tradeoffs to gain acceptable levels of control. Relatedly, maintenance of proper functioning riparian processes along the White River (i.e. BLM lands within the White River ACEC) is considered paramount in maintaining the long term suitability of these riverine galleries for bald eagle use (continued availability of sites for cottonwood regeneration).

Mitigation: None, resource concerns were integrated with the development of the proposed action.

Finding on the Public Land Health Standard for Threatened & Endangered species: Riverine habitats for bald eagle and Colorado pike-minnow currently meet the standard for special status species, but the proliferation of invasive plants represents incremental deterioration in the function and utility of cottonwood gallery forests as bald eagle roost substrate and properly functioning floodplains associated with pike-minnow habitat. The proposed action would complement recovery goals for each of these species as well as continued meeting of the land health standard by promoting the reestablishment of native riparian vegetation and natural successional processes that would eventually provide mature cottonwood habitat for perch or nest use by bald eagle and accommodate proper functioning condition of the river's channel processes, particularly it's 100-year floodplain.

WASTES, HAZARDOUS OR SOLID

Affected Environment: No hazardous or other solid wastes are known to have been stored or disposed on the subject lands.

Environmental Consequences of the Proposed Action: Under the proposed action Rodeo® would be used for control of the Tamarisk spp. and Russian olive. This chemical has been approved for use on public lands and was previously analyzed in the Vegetation Management EIS for 14 Western States. The proposed application rates of 100% strength by stump treatment will not result in a release of a reportable quantity (the active ingredient is not a listed chemical). Use of this chemical in conformance with labeled instructions would not result in the generation of hazardous waste.

Impact of No Action Alternative: There would be no opportunity for development of hazardous waste.

Mitigative Measures: None

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The proposed actions are located in the Scenery Gulch, Blacks Gulch, Tschuddi Gulch, and White River watersheds. Scenery, Blacks, and Tschuddi Gulches are situated in stream segment 9a of the White River Basin. The affected portion of the White River is located in stream segment 21 which includes the main stem of the White River from Douglas Creek to the state line.

A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list, the White River ROD/RMP, and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. It should be noted that the White River from Douglas Creek to the state line (segment 21) is listed on the states monitoring and evaluation list (M&E list) as being sediment impaired. In addition, the White River ROD/RMP has identified this portion of the White River as NOT meeting state water quality standards for suspended sediment, salinity, and nutrients. Blacks Gulch has been listed in the White River ROD/RMP as a proposed fragile watershed.

The State has classified stream segment 9a of the White River Basin as "Use Protected". The antidegredation review requirements in the Antidegredation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. Stream segment 21 has not been classified as “Use Protected” thus; the Antidegredation review requirements in the Antidegredation Rule are applicable to this segment.

Ground Water: Local water tables may be elevated in response to removal of tamarisk and Russian olive.

Environmental Consequences of the Proposed Action: Removal of tamarisk and Russian olive in areas where only these species exist (Scenery, Blacks, and Tschuddi Gulches) will reduce the affected stream banks ability to withstand normal high flows (bankfull flows). On the White River proposal, there currently is a heavy understory with down debris that would help withstand bankfull flows.

Local ground water tables may be elevated with removal of non-desirable riparian plants. Elevated water tables will aid in recharging affected stream segments and help develop desirable riparian communities.

Environmental Consequences of the No Action Alternative: Undesirable riparian species will remain in the affected systems. Stream bank stability will persist as is.

Mitigation: Planting of desirable riparian species (e.g. willows and cottonwoods) would provide bank stability in treated areas containing only undesirable plant.

Finding on the Public Land Health Standard for water quality: Segment 21 of the White River Basin is listed as a perennial stream NOT meeting water quality standards set by the state. However, with suggested mitigation the proposed actions will potential improve water quality in these stream segments.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: The Rangely treatment area involves about 0.5 mile of the lower White River below Taylor Draw dam. The lower river supports a gallery forest composed almost exclusively of Fremont cottonwood with scattered populations of coyote willow. Over the last decade or two, these riparian sites have become heavily populated with, and in some cases, dominated by Russian olive. Russian olive, and the site's scattered stands of tamarisk, are invasive riparian-associated exotics that often form monoculture canopies that effectively suppress herbaceous ground cover and the regeneration of native woody riparian plants. Additionally, Russian olive has a growth form and root structure that offers inferior channel bank protection against bank-full or flood flows.

Riparian communities associated with Black's, Tschuddi, and Scenery Gulches are typically characterized by inland saltgrass and various facultative grasses and forbs with intermittent populations of sedge or rush. These intermittent channels under alkaline soil conditions and fluctuating water tables are well suited for occupation by tamarisk. Although tamarisk has not tended to develop dense, extensive stands in this area, the prevailing stands represent a source that continues to disseminate seed and vegetative propagules to downstream sites, including the White River.

Environmental Consequences of the Proposed Action: Controlling Russian olive's site domination at the Rangely site would promote redevelopment of native plant composition and expression on about 1.5% of the White River in Colorado below Taylor Draw dam. Native vegetation, particularly early-seral coyote willow, bulrush, and phragmites, offer superior erosion resistance, and provide a measure of bank stability that promotes proper successional progression of vegetation-derived channel processes (e.g., floodplain development). Although this small project cannot be expected to exert any substantive influence on the nature or function of riverine processes, it represents about 10% of BLM's lower river holdings (BLM administers about 14% of the river below the dam) and would exemplify to private interests riparian values derived from a more diverse native community.

Control of tamarisk in the Black's Gulch drainage may have little discernible influence on channel character or channel stability at this point in time. However, without timely control, tamarisk would be expected to become increasingly prevalent in these drainages, posing a risk not only to the stability of local channel features (e.g., suppression of saltgrass and sedge/rush bank cover), but continuing to disseminate reproductive material to downstream reaches, including riverine communities along the White River.

The herbicide Habitat® (an imazapyr formulation) is specifically intended for the control of undesirable emergent, shoreline, and woody wetland aquatic vegetation in and around standing and flowing water. Although imazapyr is somewhat persistent in water (2-15 day half-life) and soil (26-143 day half-life), water soluble and mobile through alkaline soils, and is non-selective, the method of application and small quantities of product applied eliminates any reasonable risk of off-site transport or non-target vegetation effects. Similar to Habitat®, Rodeo® is a non-

selective herbicide formulated for use in aquatic environments. A formulation of Glyphosate, the chemical is highly water soluble and moderately persistent in the environment, but because it is strongly adsorbed to clay soils it has no residual soil activity and displays little tendency to move offsite. For the same reasons as above, there is virtually no risk of off-site transport or non-target vegetation effects.

Because of very small quantities of herbicide associated with stump treatment, its very precise delivery method, and there being little capacity for offsite transport of herbicide, it is inconceivable that aquatic or riparian communities in the White River or Black's Gulch and it's tributaries would be exposed to herbicide at concentrations capable of being measured or exerting adverse influence on non-target aquatic or riparian plants.

The small amount of dormant season trampling associated with the manual severing of olive and tamarisk would have no substantive influence on herbaceous ground cover or soil stability within the project sites.

Environmental Consequences of the No Action Alternative: There would be no potential for trace delivery of herbicide into aquatic or riparian habitats associated with this project. However, neglecting control and allowing unabated proliferation of these species would allow progressive deterioration of riparian character and channel function (i.e., accelerated sedimentation, over-widened channels) at and downstream of the project areas. It is likely that downstream systems would be subject to increasingly heavy and persistent chemical loads since control would ultimately necessitate more frequent and broader scale treatments.

Mitigation: None, but see Forestry section concerning protection of native riparian forms.

Finding on the Public Land Health Standard for riparian systems: The lower White River and the Black's Gulch riparian complex generally meet the land health standards, but the presence and proliferation of exotic vegetation places each of these systems at various risk of progressive deterioration (e.g., proper functioning condition of channel features). Timely control of tamarisk and Russian olive would better serve land health objectives and long term achievement of the standards.

WILDERNESS

Affected Environment: There are six Wilderness Study Areas (WSA) encompassing approximately 81,000 acres within the White River Resource Area. These areas are managed to allow for natural processes of native ecosystems.

Environmental Consequences of the Proposed Action: Although the proposed action does not fall within a Wilderness Study Area it should be noted that controlling Tamarisk spp. and Russian olive would maintain wilderness values by preventing these species from replacing native desirable species within adjacent WSAs. By controlling or limiting the spread of noxious weeds, the natural ecosystem would be able to progress within the WSA. To allow noxious

weeds to spread would likely cause irrevocable change in the naturalness component of the wilderness character.

Environmental Consequences of the No Action Alternative: The no action alternative could allow degradation of wilderness values by allowing Tamarisk spp. and Russian olive to spread on suitable sites within Wilderness Study Areas.

Mitigation: If during the preparation of the Pesticide Use Proposal, the project area is located within a Wilderness Study Area the proposal would be reviewed by the Wilderness Specialist at least 10 working days prior to proposed application. Site specific mitigation would be incorporated into the Pesticide Use Proposal.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains, prime and unique farmlands, or Wild and Scenic Rivers, threatened, endangered or sensitive plants exist within the area affected by the proposed action. For threatened, endangered and sensitive plant species Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The following data is a product of an order III soil survey conducted by the Natural Resource Conservation Service (NRCS). The accompanying table highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office.

Affected soils in the Scenery, Tschuddi, and Blacks Gulches treatment area:

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
10	Blazon, moist-Rentsac Complex	6-65%	Pinyon-Juniper woodland	2-4	Rapid	Moderate to very high	20-Oct
14	Bulkley-Abor clay loams	5-30%	Clayey Foothills	<2	Rapid	Moderate to very high	50-60
33	Forelle loam	3-8%	Rolling Loam	<2	Medium	Moderate	>60
34	Forelle loam	8-15%	Rolling Loam	<2	Medium	Moderate to high	>60
36	Glendive fine sandy loam		Foothills Swale	2-4	Slow	Slight	>60
40	Hagga loam		Swale Meadow	2-8	Slow	Slight	>60

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
41	Havre loam	0-4%	Foothill Swale	<4	Medium	Slight	>60
45	Jerry-Thornburgh-Rhone complex	8-65%	Brushy Loam/Brushy Loam	<2	Medium to rapid	Moderate to high	>60
53	Moyerson stony clay loam	15-65%	Clayey Slopes	2-4	Rapid	Very high	10-20
70	Redcreek-Rentsac complex	5-30%	PJ woodlands/PJ woodlands	<2	Very high	Moderate to high	10-20
73	Rentsac channery loam	5-50%	Pinyon-Juniper woodlands	<2	Rapid	Moderate to very high	20-Oct
74	Rentsac-Moyerson-Rock Outcrop complex	5-65%	PJ Woodlands/Clayey Slopes	<2	Medium	Moderate to very high	20-Oct
78	Rock Outcrop	50-100%	None		Very high	Slight	0
89	Tisworth fine sandy loam	0-5%	Alkaline Slopes	>4	Rapid	Moderate	>60
90	Torrifluvents gullied		None		Rapid	Very high	>60
91	Torriorthents-Rock Outcrop complex	15-90%	Stoney Foothills		Rapid	Very high	20-Oct
96	Veatch channery loam	12-50%	Loamy Slopes	<2	Med	Moderate to very high	20-40
104	Yamac Loam	2-15%	Rolling Loam	<2	Med	Slight to moderate	>60

Affected soils in the White River treatment area:

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
5	Badland	50-100%	None		Very rapid	Very high	0-10
8	Billings-Torrifluvents complex gullied	0-5%	Alkaline Slopes/None	2-8	Rapid	High	>60
16	Chipeta silty clay loam	3-25%	Clayey Salt-desert	4-16	Rapid	High	10-20
17	Chipeta silty clay loam eroded		Clayey Salt-desert	4-16	Rapid	Very high	10-20
21	Cliffdown-Cliffdown Variant complex	5-65%	Salt-desert Breaks	<2	Medium to slow	Slight to moderate	>60
25	Colorow sandy loam		Sandy Salt-desert	<2	Medium	Slight	>60

Environmental Consequences of the Proposed Action: Removal of tamarisk and Russian olive in riparian areas may temporarily reduce stream bank stability leaving the affected soils more susceptible to erosion. Also, by removing/burning woody debris (flow deflectors and sediment traps) associated with procedures outlined in the proposed actions, soils may become increasingly susceptible to erosion due to rain drop impact and flooding events.

Environmental Consequences of the No Action Alternative: None

Mitigation: Planting of desirable riparian species (e.g. willows and cottonwoods) to mitigate soil erosion in treated areas containing only undesirable plant species. Leave sufficient ground cover (woody debris) to minimize erosion.

Finding on the Public Land Health Standard for upland soils: Soils within the affected areas are currently meeting standards set by the state. Implementation of the proposed actions will not change this status.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The area contains a wide variety of plant communities ranging from salt-desert shrub to Douglass fir communities. The Scenery/Tschuddi/Blacks Gulch tamarisk spp. and Russian olive infestation is known in all three drainages to various densities generally located in close proximity to water or drainage edges. Eradication of these species is possible but only if the treatment area includes the entire drainage of each. These areas are subject to high use by vehicles related to oil and gas traffic.

Tschuddi, Blacks, and Scenery Gulches have intermittent water within the upper portions of the drainages that is usually associated with spring runoff. Tschuddi Gulch and Scenery Gulch merge to form the Blacks Gulch and are isolated drainages whose tamarisks seeds source is limited to the immediate drainages. Vegetation associated with these drainages and uplands consists mainly of greasewood, Wyoming sagebrush, and tamarisks with an understory of western wheatgrass, Sandberg bluegrass, and cheatgrass, an invasive non-native grass. Within the upper reaches of Scenery and Tschuddi Gulches, there is an increase in elevation resulting in a change of vegetation communities with upland slopes consisting of Douglass fir communities. However, the vast majority of tamarisks are located down drainage within the sagebrush/greasewood community.

The White River treatment area has the White River nearby whose vegetation is mainly dominated by cottonwoods, willows, tamarisks, and Russian olives with an understory of western wheatgrass, alkali sacaton, and inland saltgrass. Russian olives are typically located within the terraces of the channel.

Tamarisks and Russian olives are non-native, invasive plant species that are highly competitive against native vegetation. Therefore, these species have displaced desired plant communities within localities of the proposed action.

Environmental Consequences of the Proposed Action: Under the proposed action the Tamarisk spp. and Russian olive would be controlled by herbicide and cutting. Using this method there is very little soil disturbance and no seeding would be needed. With no seeding and limited soil disturbance, there would be no new opportunity for introduction of non-native plant species.

The proposed action's herbicides are effective against woody vegetation that can be applied to a site specific area associated with cut stumps of tamarisks and Russian olives. Therefore, the surrounding, non-targeted vegetative communities will receive little to no negative impact as a result from the proposed action.

A reduction in the dominance and competitive ability of tamarisks and Russian olives will enhance the native vegetation's ability to express itself.

Environmental Consequences of the No Action Alternative: Under the no action alternative, the Tamarisk spp. and Russian olive would not be controlled. There would also not be any seeding or any opportunity for new introduction of non-native invasive species.

These invasive, non-native species would continue to expand in populations within the project area and displace native vegetation.

Mitigative Measures: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* Currently, the presence of tamarisks and Russian olives are effecting the ability of the public lands to fully meet health standards as these species are a invasive and non-native component of the landscape. Under the proposal of controlling tamarisks and Russian olives, it would enhance the ability of the rangelands to meet health standards for plant communities.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: See discussion in TES section.

Environmental Consequences of the Proposed Action: See discussion in TES section.

Environmental Consequences of the No Action Alternative: See discussion in TES section.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): See discussion in TES section.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The section along the White River, immediately north of Rangely is surrounded by residential and industrial areas and most likely assumes incidental use by big game. The large cottonwoods along this corridor may provide nesting substrate for species such

as bald eagle (see TES section), red-tailed hawk and great-horned owl. There are no cliff-dwelling species that make use of the area.

The areas within Blacks, Scenery and Tschuddi Gulches are broadly encompassed by big game severe winter range. These ranges are used by big game primarily during the late fall through early spring months. The availability and quality of winter forage within these areas is low (i.e., dominated by greasewood and big sagebrush) and predominantly annual-based herbaceous forage provides an abundant, but short duration forage source in spring. Vegetation within the channels themselves (e.g., inland saltgrass) provides little forage for big game species. Douglas fir, located in the upper reaches of these drainages may provide nesting substrate for raptors. There are no cliff-dwelling species that derive important use from these areas.

Small mammal populations are poorly documented, however, the species that are likely to occur in this area display broad ecological tolerance and are widely distributed throughout the Rocky Mountain regions. No narrowly distributed or highly specialized species or subspecific populations are known to inhabit this area.

Environmental Consequences of the Proposed Action: The proposed action is not expected to result in any adverse effects to terrestrial wildlife. Both Imazapyr and Rodeo® Glyphosate are practically non-toxic to avian and terrestrial wildlife. Label consistent application of these chemicals as proposed poses no conceivable toxic threat or chronic exposure level to resident birds and mammals owing to the chemical's relative nontoxic character, and limited extent of application. The proposed action specifically targets tamarisk and Russian olive, neither of which provides a valuable source of forage or cover for big game or raptor species. Actions associated with vegetation treatments would occur outside the primary period of big game occupation. There would be no negative impacts on nesting raptors as all work is scheduled to take place outside of the breeding season.

Environmental Consequences of the No Action Alternative: Under this alternative there would be no potential exposure of terrestrial wildlife species to herbicides. However, failure to implement this action would result in the continued suppression of native vegetation, both woody and herbaceous, which provide valuable forage and cover for terrestrial species.

In the absence of effective control, it is inevitable that resultant declines in forage availability and diversity (i.e. associated seeds, fruit and substrate for invertebrate prey) and widespread reduction in suitable shrub cover attending control would also reduce both nongame bird and small mammal breeding pair density and reproductive performance.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The project areas currently meet the land health standard for terrestrial wildlife communities. However, the absence of effective control would result in the continued proliferation of these invasive species (tamarisk and Russian olive), putting the community at risk. Implementation of the proposed action would result in the promotion of

native vegetation, and be consistent with meeting the land health standard for terrestrial wildlife and associated habitats.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management	X		
Forest Management			X
Geology and Minerals	X		
Hydrology/Water Rights		X	
Law Enforcement		X	
Noise		X	
Paleontology	X		
Rangeland Management			X
Realty Authorizations	X		
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: On proposed treatment sites associated with Scenery, Tschuddi, Blacks Gulches motorized travel is limited to existing routes from October 1 through May 1 and is open to cross country motorized travel the remainder of the year. On proposed treatment sites associated with the White River north of the Town of Rangely (Township 2 North, Range 102 West, Section: 36) motorized travel is limited to existing routes year-round and no motorized off road cross-country travel is permitted.

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

FOREST MANAGEMENT

Affected Environment: No riparian tree types are associated with Blacks Gulch. Along the White River near Rangely the native tree species include Fremont cottonwood and coyote willow. These species are being displaced by Russian olive and tamarisk.

Environmental Consequences of the Proposed Action: Under this alternative Tamarisk spp and Russian olives would be removed allowing the existing cottonwoods to remain as a seed source for reestablishing cottonwoods on site. Willows are expected to increase on the stream bank and provide competition against the establishment of olives and tamarisk.

Environmental Consequences of the No Action Alternative: Over time Russian olive and tamarisk would completely dominate the streambanks of the White River. The cost of restoring these areas would be time consuming and expensive.

Mitigation: Place debris piles away from cottonwoods to prevent damage from burning.

RANGELAND MANAGEMENT: (This includes any vegetation information related to Public Land Health Standard 3 not addressed in other sections.)

Affected Environment: The proposal in Scenery, Tschuddi, and Blacks Gulches are located within the Blacks Gulch allotment (06612). Sam and Virginia Love (0500089) and Dow ranches (0501472) are the authorized grazing permit holders on the Blacks Gulch allotment and operate on a 50/50 basis. The allotment can be authorized for 510 cows from April 16th to December 30th. However, typically the permit holders turn cattle onto the allotment in mid April and leave late September.

On the Blacks Gulch allotment, cattle will not be actively grazing within the majority of the treatment area until the spring of 2006. However, cattle may potentially be trailing through the area as they exit the allotment for private lands along the White River.

The White River Corridor treatment area is located within the Raven Park allotment (06314). Morapos Sheep, Co. (0501466) is the BLM grazing permit holder who can be authorized for 1400 sheep from November 20th to April 6th.

Environmental Consequences of the Proposed Action: The herbicide Habitat® (Isopropoylamine salt of Imazapyr) manufactured by BASF - The Chemical Company, has no restrictions on livestock consumption of water from the treatment area. Imazapyr and Glyphosate (Roundup) is practically non-toxic to mammals. Imazapyr is rapidly excreted by mammals.

There is little opportunity for livestock consumption and digestion as the herbicides will be applied on a site specific basis by “painting” the stumps of cut tamarisks and Russian olives.

Livestock will benefit from the removal of Russian olives and tamarisks are these plants are displacing native vegetation. With a reduction of tamarisks located at livestock watering

localities, a greater amount of water will be available for livestock consumption as tamarisks readily uptake water.

Environmental Consequences of the No Action Alternative: Tamarisks are located within many livestock watering localities and tamarisks readily uptake water, thus allowing less water for livestock consumption at these watering locations. Tamarisk and Russian olives will continue to displace native vegetation.

Mitigation: None

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, fishing, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

Environmental Consequences of the Proposed Action: By removing Tamarisk and Russian olives from White River north of Rangely, an increase in recreation use could be expected due to removal of thick, nearly impenetrable invasive vegetation which precludes recreational use of river bottoms and stream banks.

Environmental Consequences of the No Action Alternative: Proposed White River treatment site north of Rangely would continue to be difficult to utilize by recreationists.

Mitigation: None.

VISUAL RESOURCE

Affected Environment: Proposed treatment sites associated with Scenery, Tschuddi, Blacks Gulches are within a VRM class III area. The objective of class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape. Proposed treatment sites associated with the White River north of the Town of Rangely (Township 2 North, Range 102 West, Section: 36) are within a VRM class II area. The objective of class II is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action is small in scale relative to the surrounding landscape and will not change the basic elements found in the

predominant landscape; therefore, any modifications will be unseen to the casual observer, and VRM class II and III objectives will continue to be met. Furthermore, any disturbed vegetation will return making the action virtually unnoticeable within a period of a few years.

Environmental Consequences of the No Action Alternative: No impact on visual resources.

Mitigation: None.

CUMULATIVE IMPACTS SUMMARY: The management of noxious, invasive plant species as is proposed is essential to both the short and long term maintenance of ecosystem function and integrity. The use of herbicides is carefully controlled to protect the environment, public, and the applicators. This environmental assessment provides flexibility to use the method which best meets the treatment site and environmental considerations. The actual treated acres are expected to increase, while the pounds of chemical / acre used is expected to decrease on a yearly basis. The reason for this is as acres are controlled the amount of chemical used for maintenance decreases. With the mitigation proposed in this environmental assessment and the pesticide labels for Rodeo® and Habitat® there are no known adverse cumulative impacts to any of the resources discussed in this document.

The No Action Alternative would not allow for control of the tamarisk and/or Russian olive by herbicides. Acres dominated by these species would continue to increase and proportionally degrade the basins resources. Degradation of habitat would negatively impact aquatic and terrestrial wildlife habitat, and livestock management. At some point, the cost of control would require a significantly higher dollar amount and quantities of chemical applied to the public lands due to the increased noxious, invasive species population. Broad herbicide application would inescapably involve severe, long term wildlife concessions manifested by the loss of forage and cover provided by broadleaf woody vegetation including sagebrush, willow and serviceberry.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Nate Dieterich	Hydrologist	Air Quality
Ed Hollowed	Wildlife Biologist	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Michael Selle	Archeologist	Cultural Resources Paleontological Resources
Melissa Kindall	Rangeland Management Technician	Invasive, Non-Native Species
Lisa Belmonte	Wildlife Biologist	Migratory Birds
Ed Hollowed	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Vern Rholl	Supervisory NRS	Wastes, Hazardous or Solid
Nate Dieterich	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Ed Hollowed	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Nate Dieterich	Hydrologist	Soils
Jed Carling	Rangeland Management Specialist	Vegetation
Lisa Belmonte	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Jed Carling	Rangeland Specialist	Rangeland Management
Linda Jones	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Chris Ham	Outdoor Recreation Planner	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2005-197-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to implement the proposed action for the control of the Tamarisk spp. (salt cedar) and Russian olive (*Elaeagnus angustifolia L.*) using herbicidal control. This alternative is selected subject to the stipulations and safeguard measures identified in this document and the Thirteen State EIS. Control of noxious weeds is in compliance with the White River RMP of 1997 with the objective of: "Manage noxious weeds so that they cause no further negative environmental, aesthetic or economic impact".

MITIGATION MEASURES: In addition to *Mitigation and Stipulations Associated with the Proposed Action Alternative* and *Safeguard Measures* contained on pages 3, 4, and 5 of this document the following mitigation will apply:

1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines

for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

3. Slash piles for burning shall avoid sites 5RB 2710 and 5RB 2796.

4. Planting of desirable riparian species (e.g. willows and cottonwoods) would provide bank stability in treated areas containing only undesirable plant. Leave sufficient ground cover (woody debris) to minimize erosion.

5. If during the preparation of the Pesticide Use Proposal, the project area is located within a Wilderness Study Area the proposal would be reviewed by the Wilderness Specialist at least 10 working days prior to proposed application. Site specific mitigation would be incorporated into the Pesticide Use Proposal.

6. Place debris piles away from cottonwoods to prevent damage from burning.

COMPLIANCE/MONITORING: The process to be followed includes; identification/size-up of the infestation, completion of a Pesticide Use Proposal, do the application, complete application documentation, reassess the following year, and follow up treatments if necessary with continued yearly checks of the treated infestation.

NAME OF PREPARER: Melissa J. Kindall

NAME OF ENVIRONMENTAL COORDINATOR: Caroline P. Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL: Kent E. Walter
Field Manager

DATE SIGNED: 09-09-05

ATTACHMENTS: Pesticide Use Proposal
Map of the Proposed Action Location

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COLORADO BLM PESTICIDE USE PROPOSAL

PROPOSAL NUMBER: 05-13

REFERENCE NUMBER: CO-110-05-197-EA

FIELD OFFICE CO-11000 (White River Field Office) **COUNTY** Rio Blanco

DATE August 22, 2005

LOCATION: Township 1 North, Range 96 West, 6th P.M.
Township 2 North, Range 96 West, 6th P.M.
Township 3 North, Range 96 West, 6th P.M.

DURATION OF PROPOSAL:

I. PESTICIDE APPLICATION (including mixtures and surfactants):

TRADE NAME(s): Rodeo®
Habitat®

COMMON NAME(s): Rodeo®: glyphosate: N-(phosphonomethyl)glycine, isopropylamine salt

Habitat®: isopropylamine salt of Imazapyr (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid

EPA REGISTRATION NUMBER(s): Rodeo®: #62719-324
Habitat®: #241-426

MANUFACTURER(s): Rodeo®: Dow AgroSciences
Habitat®: BASF – The Chemical Company

FORMULATION: Liquid _X_\ Rodeo® Granular _____\
Liquid _X_\ Habitat® Granular _____\

The use of a surfactant will not be done at this time. If it is decided that such an addition is warranted an amendment to the environmental assessment and pesticide use proposal will be done at that time.

METHOD OF APPLICATION:

Cutting and stump treatment: Stump treatment of the herbicide will be done by "painting" individual stumps. Cutting of the brush and tree species will be done with hand clippers or battery powered saw tools along with any necessary safety precautions for noise, eyes, and hand protection.

MAXIMUM RATE OF APPLICATION:

USE UNIT ON LABEL: Rodeo®: 50 to 100 Percent Solution
Habitat®: Dilute Solution: 8 to 12 oz to 1 gallon water.

POUNDS ACTIVE INGREDIENT/ACRE: Rodeo®: 5.4 pounds/gallon
Habitat®

INTENDED RATE OF APPLICATION:

APPLICATION DATE(S): Fall Treatment Only: 2005, 2006, 2007

NUMBER OF APPLICATIONS: One per year.

II. PEST (List specific pest(s) and reason(s) for application): Tamarisk (salt cedar), *Tamarisk spp.*; and Russian Olive (*Elaeagnus angustifolia*)

III. MAJOR DESIRED PLANT SPECIES PRESENT: Native grasses, forbs, shrubs with potential for regeneration of riparian species such as yellow or coyote willows, and cottonwood.

IV. TREATMENT SITE: (Describe land type or use, size, stage of growth of target species, slope and soil type): Site best described as a rangelands with the treatments located mainly in the drainage bottoms. Four main side drainages that run approximately 10 miles long ultimately drain into Blacks Gulch which runs from these junctions for approximately another 6 miles until draining in the White River.

ESTIMATED ACRES: 60

V. SENSITIVE ASPECTS AND PRECAUTIONS: (Describe sensitive areas [e.g., marsh, endangered, threatened, candidate and sensitive species habitat] and distance to treatment site. List measures taken to avoid impact to sensitive areas: These drainage bottoms, in most cases, do not run perennial waters but have occasion for riparian influences from snow melt run-off and seasonal rain showers. A few areas, located on private in holdings, have associated riparian and wetland areas from perennial spring sources but will not be a part of this treatment program. The private land owners will be taking care of their noxious weeds species associated with their private in holdings. With the individual treatment of each plant that measurement alone will help us to avoid any impacts to or in sensitive areas.

V. **NON TARGET VEGETATION: (Describe the impacts, cumulative impacts, and mitigations to non target vegetation that will be lost as a result of this chemical application):** Using the proposed method of control reduces or nearly eliminates the risk to non target vegetation. With this method healthy and productive native plant communities will not be impacted.

VII. INTEGRATED PEST MANAGEMENT: (Describe how this chemical application fits into your overall integrated pest management program for the treatment area: Other means of noxious weed management/control include mechanical and biological control. Mechanical control (cultivation) is not appropriate in an extensive rangeland environment because both tamarisk and the Russian olive are deep-rooted perennial species. Biological control species (insects) are not currently available in the United States to either control or reduce the current infestation level. Neither of these alternatives will be analyzed further in this document.

Resource Area Coordinator Signature: _____ Date:
Robert J. Fowler

Certified Pesticide Applicator's Signature:_____ Date:
Melissa J. Kindall

BLM Manager's Approval:_____ **Date:**
Kent E. Walter

COSO PUP Coordinator: _____ Date:

_____ **Date:**
Acting DSD, Lands and Renewable Resources
_____ CONCUR OR APPROVED
_____ NOT CONCUR OR DISAPPROVED
_____ CONCUR OR APPROVED WITH MODIFICATIONS

Location of Proposed Action
CO-110-2005-197-EA